## SUPPLEMENTAL MATERIAL

## SUPPLEMENTAL FIGURES FOR TEACHING PURPOSES

## FIG. S1

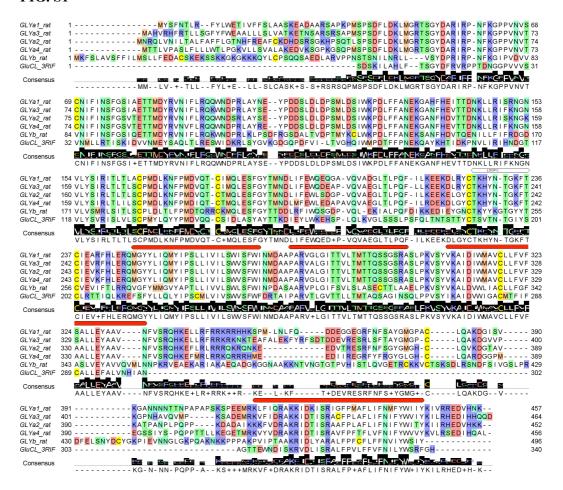


FIGURE S1. Comparison of GlyR subunit sequences with GluC. The sequences of GlyR $\alpha$ 1-4 show a high extent of identity (>80%) as well as significant homology to GluCl, whereas GlyR $\beta$  is much less conserved. TMs are indicated (red bars), and residues are colour-coded as follows: orange, methionine; yellow, cysteine; green, serine/threonine; cyan, glutamine/asparagine; red, aspartic acid/glutamic acid; blue, histamine/lysine/arginine. The remaining hydrophobic residues are not coloured. A consensus sequence is presented at the bottom.

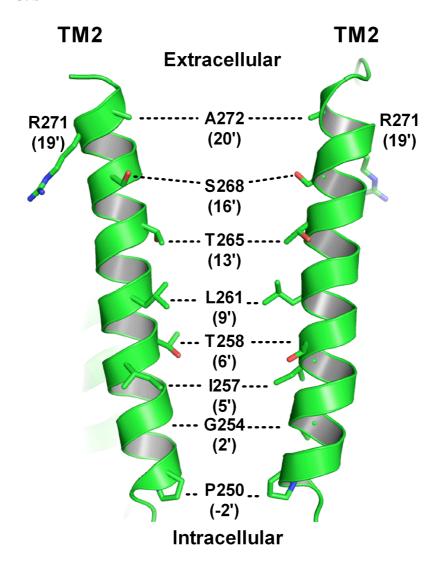


FIGURE S2. Section through the TM2 regions of the homomeric GlyRα1 channel. Pore lining residues are indicated. The distance between corresponding residues progressively decreases from the outer (A272; 16.4 A) to the inner (P250; 8.6 A) channel mouth. Residue R271, a major site of hyperekplexia mutations, is also shown. The model is based on the open GluCl structure, thus representing the conducting state.